		-43
D		T
I.	V	

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only
International Application No.
International Filing Date
Name of receiving Office and "PCT International Application"

	·						
	Applicant's or agent's file reference (if desired) (12 characters maximum) 10455-1PCT						
Box No. 1 TITLE OF INVENTION							
MICROCOLUMN FOR EXTRACTION OF ANALYTES	FROM LIQUIDS						
Box No. II APPLICANT							
Non-and address (P. 2) and (it							
Name and address: (Family name followed by given name; for a designation. The address must include postal co	e legal entity, full official ode and name of country.)	This person is also inventor.					
CERA, INC. 14180 Live Oak Avenue, Suite I		Telephone No.					
Baldwin Park, California 91706-1350		(818) 814-2688					
United States of America		Facsimile No.					
		(818) 962-5574					
•		Teleprinter No.					
State (i.e. country) of nationality:	State (i.e. country) of resi	dence					
US	US						
This person is applicant for the purposes of: all designated States X all designated the United States	States except the of A	United States America only the States indicated in the Supplemental Box					
Box No. III FURTHER APPLICANT(S) AND/OR (FURTI		and outpremental sex					
Name and address: (Family name followed by given name: for a designation. The address must include postal control of the contr		•					
	ode and name of country.)	This person is:					
GOØD, Thomas J.		applicant only					
669 Mt. Wilson Trail Sierra Madre, California 91024							
Sierra Madre, California 91024 United States of America		X applicant and inventor					
· · · · · · · · · · · · · · · · · · ·		inventor only (If this check-box is marked, do not fill in below.)					
State (i.e. country) of nationality:							
US	State (i.e. country) of resid	lence:					
This person is applicant all designated all designated for the purposes of:		United States					
the Office Sta	tes of America of A	merica only the Supplemental Box					
To the appreciate and/of (further) liventors are indicated of							
Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE							
The person identified below is hereby/has been appointed to act of the applicant(s) before the competent International Authorities	as: X age	ent common representative					
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.).							
SHELDON, Jeffrey G.		(818) 796-4000					
SHELDON & MAK, INC.	F	Fascimile No.					
225 South Lake Avenue, 9th Floor Pasadena, California 91101-3021	(818) 795-6321						
United States of America	-	Teleprinter No.					
		·					
Mark this check-box where no agent or common representation indicate a special address to which correspondence should be	ve is/has been appointed an	id the space above is used instead to					

2

Sheet No.



Continuation of Box No. III FURTHER APPLICANTS AND/OR (FURTHER) INVENTORS							
If none of the following sub-boxes is used, this sheet is not to be included in the request.							
Name and address: (Family name followed by given designation. The address must income REDMOND, Alan F. 6238 Hart Avenue Temple City, California 91780 United States of America	name; for a legal entity, full official lude postal code and name of country.)	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.)					
State (i.e. country) of nationality: US	State (i.e. country) of re	esidence:					
This person is applicant all designated	all designated States except	he United States of America only the Supplemental Box					
Name and address: (Family name followed by given designation. The address must inc	name: for a legal entity. full official lude postal code and name of country.)	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.)					
State (i.e. country) of nationality:	State (i.e. country) of re	esidence:					
This person is applicant all designated for the purposes of:		the United States indicated in the Supplemental Box					
Name and address: (Family name followed by given designation. The address must inc	name: for a legal entity, full official lude postal code and name of country.)	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.)					
State (i.e. country) of nationality:	State (i.e. country) of r	esidence:					
This person is applicant all designated for the purposes of:		the United States of America only the States indicated in the Supplemental Box					
Name and address: (Family name followed by given designation. The address must inc	name: for a legal entity full official lude postal code and name of country.)	This person is: applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.)					
State (i.e. country) of nationality: State (i.e. country) of residence:							
This person is applicant all designated for the purposes of:	all designated States except the United States of America	the United States the States indicated in the Supplemental Box					
Further applicants and/or (further) inventors are indicated on another continuation sheet.							

Sheet	No	3

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-baxes: at least one must be marked): Regional Patent A P ARIPO Patent: KE Kenya, LS Lesotho. MW Malawi. SD Sudan. SZ Swaziland, UG Uganda, and any other State which is a Contracting State of the Harvare Protocol and of the PCT A P ARIPO Patent: KE Kenya, LS Lesotho. MW Malawi. SD Sudan. SZ Swaziland, UG Uganda, and any other State which is a Contracting State of the Eurastian Patent Convention and of the PCT A P ARIPO Patent: KE Kenya, LS Lesotho. MW Malawi. SD Sudan. SZ Swaziland, UG Uganda, and any other State which is a Contracting State of the European Patent in Contracting State of the PCT (Industrial Industrial Industria	Box N	Vo.V	DESIGNATION OF STATES							
Name	The following designations are hereby made under Rule 4 9(a) (mark the applicable about the									
EA Eurasian Patent: AZ Azerbaijan. BY Belans. KZ Kazakstan, RURussian Federation. TJTajikistan, TM Turkmenistan, and any other State Which is a Contracting State of the Eurasian Patent Convention and of the PCT. EP Engogean Patent: AT Asstra. BE Belgium, CH and LI Switzerland and Liecthenstein. DE Germany, DK Denmark, and any other State which is a Contracting. BC Germany, DK Denmark, DK Denmark and Denmark an	Regio	nai P	ratent	u/ K	ne up	pricable theth-boxes; at least one must be marked):				
EA Eurasian Patent: AZ Azerbaijan. BY Belans. KZ Kazakstan, RURussian Federation. TJTajikistan, TM Turkmenistan, and any other State Which is a Contracting State of the Eurasian Patent Convention and of the PCT. EP Engogean Patent: AT Asstra. BE Belgium, CH and LI Switzerland and Liecthenstein. DE Germany, DK Denmark, and any other State which is a Contracting. BC Germany, DK Denmark, DK Denmark and Denmark an	_	_	•							
EP European Patent: AT Austria BE Belgium, CH and LI Switzerland and elicehtenstein. DE Germany, DK Denmark, ES Sania. FR France, CBI United Kingdom. GR Greece. IE Ireland. IT Italy, LU Luxembourg. MC Monaco. NL Netherlands. PT Portugal. Sweetn. and any other State which is a Contracting State of the European Patent Convention and of the PCT	_									
European Patent: AT Austria. BE Belgium. CH and LI Switzerland and Liechtenstein. DE Germany. DK Demants. Spann. FR France, GB United Kingdom. GR Greece. El Freland. IT flaty. UL Luxembourg. MC Monaco. NL Netherlands. PT Portugal. SE Sweden. and any other State which is a Contracting State of the European Patent of the Contracting State of the European Patent of the Contracting State of the European Patent of the Contracting State of the European Patent of Contracting State of the European Patent of Contracting State of the Far		EA	- State of the Ediasian Patent Convention and of the PCT							
which is amember State of OAPI and a Contracting State of the PCT if forher kind of protection or treatment desired. specify on dotted lines: AL Albania	Lxl	EP	European Patent: AT Austria. BE Belgium. CH and LI Switzerland and Liechtenstein. DE Germany, DK Denmark, ES Spain. FR France, GB United Kingdom. GR Greece. IE Ireland. IT Italy. LU Luxembourg, MC Monaco, NL Netherlands. PT Portugal, SE Sweden, and any other State which is a Contracting State of the France.							
National Patent (if other kind of protection or treatment desired. specify on dotted line): AL Albania MM Armenia MM C Madagascar AL Austraia MK The former Yugoslav Republic of Macedonia MK Mongolia MB B Barbados MW Malawi MR Mongolia MB B Barbados MW Malawi MR Mongolia MR Mong	X	OA	A OAPI Patent: BF Burkina Faso. BJ Benin. CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon. GA Gabon. GN Guinea, ML Mali. MR Mauritania. NE Niger, SN Senegal, TD Chad. TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (Inter kind of protection and any other State).							
MA Albania MB Madagascar	Natio	nal Pa	atent (if other kind of protection or treatment desired			demand times.				
AM Armenia X MG Madagascar X MK The former Yugoslav Republic of Macedonia X AZ Azerbajjan X MN Mongolia X MW Malawi	X	ΑL	Albania	_						
AT Austrai	X	AM	Armenia							
AU Australia AZ Azerbaijan BB Barbados WM Molavi BG Bulgaria XMV Mexico BR Brazii XMV Mexico XMV Seve Zealand XMV Mexico XMV Mexico XMV Seve Zealand XMV Seve Zealand XMV Mexico XMV Seve Zealand XMV Severaline XMV Severaline XMV Severaline XMV Severaline XMV Severaline	X									
MR Mongolia MR Malawi MR Malawi MR Malawi MR Mexico MR	_				IVIN					
BB Barbados				_						
BG Bulgaria X MX Mexico BR Brazi				==		_				
BR Brazil X NO Norway BY Belarus X NZ New Zealand X CA Canada X PL Poland X PT Portugal X CN China X RO Romania X R	_									
Section Sect				X	MX	Mexico				
CA Canada	_			\mathbf{x}	NO	Norway				
CA Canada	=			X	NZ	New Zealand				
CH and LI Switzerland and Liechtenstein X PT Portugal	=			X						
CN China X RO Romania X RU Russian Federation X RUS Russian X RUS Russian Russian Federation X RUS Russian Russia	X	CH	and LI Switzerland and Liechtenstein	X	PT					
CZ Czech Republic X RU Russian Federation X SD Sudan X SE Sweden X SE Sweden X SE Sweden X SE Sweden X SE Sudan X SE Sweden X SE Spain X SI Slovenia X SI Slovenia X SE Sweden X SE Spain X SI Slovenia X SE Sweden X SE Spain X SI Slovenia X SE Sweden X SE Sw	\square	CN	China	=	RO					
DK Denmark X SE Sudan	\Box	CZ	Czech Republic	=	RU	·				
DK Denmark EE Estonia SE Spain SI Slovenia FI Finland SK Slovakia GB United Kingdom TTJ Tajirkmenistan HU Hungary IS Iceland TR Turkey IS Iceland TT Trinidad and Tobago JP Japan KE Kenya KE Kenya KE Kenya KE Kenya UG Uganda KG Kyrgyzstan UG Uganda KG Kyrgyzstan VN Uited States of America Continuation in par KR Republic of Korea XUZ Uzbekistan XUZ Uzbekist	\square	DE	Germany							
EE Estonia ES Spain SI Slovenia SI TJ Trajikistan Turkey SI TR Turkey SI Turkey SI Uvikenie SI Ukraine SI UK Uraine SI UK Uganda SI UK Uganda SI UK Uganda SI UK Uzbekistan SI UK Uzbekistan SI UZ Uzbekistan SI UK Viet Nam SI LK Sri Lanka Check-boxes reserved for designating States (for the purposes of a national patent) which have become party to the PCT after issuance of this sheet: SI LS Lesotho SI LS Lesotho SI LS Lavia In addition to the designations made above, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except the designation(s) of The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant on which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant and which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant and confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant and confirmed before the expiritation of 15 months from the priority date is to be regarded as withdrawn by the applicant and confirmed before the expiritation of 15 months from the priority date is to be regarde	X			=		,				
ES Spain	Ī			==		·				
FI Finland SK Slovakia GB United Kingdom TJ Tajikistan TM Turkmenistan TM Turkey IS Iceland TT Trinidad and Tobago TT Trinidad and Tobago TT Trinidad and Tobago TT Trinidad and Tobago TO US United States of America Continuation in part KE Kenya US United States of America Continuation in part KP Democratic People's Republic of Korea TUZ Uzbekistan VN Viet Nam KZ Kazakstan Check-boxes reserved for designating States (for the purposes of a national patent) which have become party to the PCT after issuance of this sheet: LI Lithuania LU Luxembourg LU Luxembourg LU Luxembourg LU Luxembourg LU Luxembourd In addition to the designations made above, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except the designations of 15 months from the propriet date is to be regarded as withdrawn by the applicant at heaverston of the purpose of the supplicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the propriet date is to be regarded as withdrawn by the applicant at the expiration of the triangle of the purpose of the triangle of the tr	=	ES				· ·				
GB United Kingdom GE Georgia TM Turkmenistan HU Hungary TR Turkey IS Iceland TT Trinidad and Tobago JP Japan KE Kenya KG Kyrgyzstan KG Kyrgyzstan KD UG Uganda US United States of America Continuation in par KP Democratic People's Republic of Korea KR Republic of Korea XUZ Uzbekistan XU	(X			_						
GE Georgia X TM Turkmenistan X TR Turkey X Turke										
HU Hungary										
X IS Iceland X TT Trinidad and Tobago X JP Japan X UA Ukraine X UG Uganda X UG Uganda X US United States of America Continuation in par X VP Democratic People's Republic of Korea X UZ Uzbekistan UZ		GE	Georgia	X	TM	Turkmenistan				
X	ĽX			X	TR	Turkey				
X KE Kenya				X	TT	Trinidad and Tobago				
X KE Kenya	<u> </u>			X	UA	Ukraine				
X US United States of America Continuation. in par X VP Democratic People's Republic of Korea X UZ Uzbekistan X VN Viet Nam X X X X X X X X X	<u>X</u>			X						
X UZ Uzbekistan X VN Viet Nam VN VN VN Viet Nam VN VN VN Viet Nam VN Voet Nam VN VN VN VN VN Viet Nam VN Voet Nam VN VN VN VN VN VN VN V	X	KG	Kyrgyzstan	X						
X UZ Uzbekistan X UZ Uzbekistan X UZ Uzbekistan X VN Viet Nam X X X X X X X X X	X	KP	Democratic People's Republic of Korea	_						
KR Republic of Korea X VN Viet Nam X VN Viet Nam X KZ Kazakstan X LK Sri Lanka Check-boxes reserved for designating States (for the purposes of a national patent) which have become party to the PCT after issuance of this sheet: X LS Lesotho X Israel Israel X LT Lithuania X LU Luxembourg X LV Latvia				(V)	UZ.					
X KZ Kazakstan Check-boxes reserved for designating States (for the purposes of a national patent) which have become party to the PCT after issuance of this sheet: X LS Lesotho X Israel X LT Lithuania Israel X LU Luxembourg Israel X LV Latvia Israel X LV Latvia Israel X LY Latvia Is	\square	KR		=						
LK Sri Lanka Check-boxes reserved for designating States (for the purposes of a national patent) which have become party to the PCT after issuance of this sheet: LS Lesotho LI Lithuania LU Luxembourg LV Latvia In addition to the designations made above, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except the designation(s) of The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time	Ī	ΚZ	Kazakstan	A	711					
LR Liberia issuance of this sheet: LS Lesotho	Ī			Chec	k-bo	kes reserved for designating States (for the purposes of				
X LS Lesotho	X			a nai	ionai	patent) which have become party to the PCT after				
LU Luxembourg LV Latvia In addition to the designations made above, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except the designation(s) of The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time	Ī	LS	Lesotho							
LU Luxembourg X LV Latvia In addition to the designations made above, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except the designation(s) of The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time	=			7						
In addition to the designations made above, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except the designation(s) of The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time	<u> </u>									
In addition to the designations made above, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except the designation(s) of The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time	[∆] □∰									
The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time	<u> </u>			<u>Ц</u>						
The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time	in add under:	ition	to the designations made above, the applicant also m	akes	under	Rule 4.9(b) all designations which would be permitted				
The state of the s	The ap	plicar	at declares that those additional designations are subject	7.10.0	ontin	nation and these and designations and the same designation and the same				
			The man of 12 months from the priority date is to be le	garde	d as v	withdrawn by the applicant at the expiration of that time				

		Sheet No.	4			
Box No. VI	PRIORITY CLAIM	Furt	her priority claim	is are indicate	d in the Supr	elemental Box
The priority of	of the following earlier 200	ircation(s) is hereby clair	ned:			
Co tin which, o application	ountry r for which, the on was filed)	Filing Date dav/montry/cari	į	cation No.	int	Office of filing tonly for regional or ternational application;
ítem (1)			:	•	ı	
item (2)	<u>:</u>		<u> </u>			
item (3)				· · · · · · · · · · · · · · · · · · ·		<u>.</u>
The rec Bureau	ing check hox if the certified cope e receiving Office to fee may be eiving Office is hereby red a certified copy of the earl	uested to prepare and tra ier application(s) identifi	nsmit to the Inter		the nurposes of	the present international
Box No. VII	INTERNATIONAL SE					
Choice of Inte	ernational Searching Aut o carry out the international sea	hority (ISA) (If two or mor	e International Sear	ching Authoriti	es ICA /IIS	!
earlier search out or requested such search or r	h Fill in where a search tinteri l and the Authority is now reque equest either by reference to the	national, international-type o	rother) by the inter	national Search	ine Authority i e results of tha ce to the search	has already been carried
Box No. VIII	CHECK LIST			 -		
This interna	ational application contain	This internation:	ıl application is ac	companied by	the item(s)	narked below:
I. reque	ig number of sheets: st 5 sheets	separa	e signed of attorney		ee calculatio	
2. descri	3 3110013	7 CODY O	f general	د <u></u> ه	eparate ind	ications concerning
3. claim 4. abstra	, , , , , , ,	power	of attorney		iepositea mic	croorganisms
5. drawi	- 3110013	lack of	ent explaining signature	7 r	iucleotide an equence listi	d/or amino acid ng (diskette)
7	Total : 25 sheets	4. priority identificas item	documen((s) ed in Box No. VI (s):	8. X c	other (<i>specif</i> y k. #): Transmittal, & postcard
Figure No	3 of the drawings	(if any) should accompa	ny the abstract w	hen it is publi:	shed.	
Box No. IX	SIGNATURE OF APPL			·		
Next to each signat	ure, indicate the name of the perso	n signing and the capacity in wh	ich the person stens tif	such canacity is n	ot obvious from	reading the request).
	•				•	
	2. ⁻		•			• •
\ <u></u>			4		/ /	
Mon	us Good		· Wa	n A	ulmo	w.
Thomas	J. GOOD, Presider	nt, CERA, INC.	Alan F. R	EDMOND		
1. Date of acti	ual receipt of the purported	For receiving (Office use only -			2 0
3. Corrected d	at application: late of actual receipt due to	later but				2. Drawings:
4. Date of tim	ely receipt of the required	:hiering				
5. Internationa	Searching Authority	Δ / 6.	Transmitta	of search co	py delayed	not received:
pecified by	the applicant: IS	A /	until searc	h fee is paid	py delayed	

Date of receipt of the record copy by the International Bureau use only
Form PCT/RO/101 (last sheet) (January 1994: reprint 5 July 1994)



Supplemental Box

If the Supplemental Box is not used, this sheet need not be included in the request.

Use this box in the following cases:

 If, in any of the Boxes, the space is insufficient to furnish all the information:

in particular:

- (i) if more than two persons are involved as applicants and/or inventors and no "continuation sheet" is available:
- (ii) if, in Box No. 11 or in any of the sub-boxes of Box No. 111, the indication "the States indicated in the Supplemental Box" is checked:
- (iii) if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America:
- (iv) if, in addition to the agent(s) indicated in Box No. IV, there are further agents:
- (v) if, in Box No. V: the name of any State (or OAPI) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Box No. V, the name of the United States of America is accompanied by an indication "Continuation" or "Continuationin-part":
- (vi) if there are more than three earlier applications whose priority is claimed:
- 2. If the applicant claims, in respect of any designated Office, the benefits of provisions of the national law concerning non-prejudicial disclosures or exceptions to lack of novelty:

in such case, write "Continuation of Box No. ..." [indicate the number of the Box] and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient;

in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III;

in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, European or OAPI patent) for the purposes of which the named person is applicant;

in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, European or OAPI patent) for the purposes of which the named person is inventor;

in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV:

in such case, write "Continuation of Box No. V" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;

in such case, write."Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.

in such case, write "Statement Concerning Non-Prejudicial Disclosures or Exceptions to Lack of Novelty" and furnish that statement below.

Continuation of Box No. IV:

ANDERSON, Denton L. MAK, Danton K. FARAH, David A. ZARRABIAN, F. Michael